

REDUNDANT TELECOMMUNICATION SYSTEM USING MEMORY
EQUALIZATION APPARATUS AND METHOD OF OPERATION

ABSTRACT OF THE DISCLOSURE

5 Data which must be memory equalized across a redundant, high
availability system utilizing processor-based components is
structured in memory segments which form data packets for a data
link between active and standby components. Direct memory access
is employed to copy memory segments within the active component
into a queue for the data link, which transfers memory segments
without utilizing the processor within the active component while
10 automatically verifying data integrity and acknowledging successful
data transfers. The direct memory access copying of memory
segments to the queue may be triggered for changed memory segments
by either the processor or specialized hardware within the active
15 component, or may be run in a continuous loop sequencing through a
predefined range of memory segments. The standby component may
thus be kept abreast of changes to data within memory segments,
such as changes to call states or resource allocation records
relating to call processing.